

**REMARKS**

Claims 1, 3-6, 8-10, 12, 14-15 and 19-23 are pending in the application and all stand rejected. Claims 1, 12, and 22 have been amended. This is an earnest attempt to put all claims in proper form for immediate allowance. Reconsideration and allowance of all pending claims is respectfully requested in view of the following:

***Response to Rejection of Claims – 35 U.S.C. §103***

Claims 1, 3-6 and 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sainsbury (U.S. Patent No.6,104,162) (Sainsbury hereinafter) in view of Wilcox (U.S. Patent No. 5,994,885) (Wilcox hereinafter) and further in view of Shyr (U.S. Patent No. 5,903,764) (Shyr hereinafter).

Claims 12, 14-15 and 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sainsbury in view of Hatular (U.S. Patent No.6,184,660) (Hatular hereinafter) in further view of Wilcox and in further view of Shyr.

Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sainsbury in view of Wilcox and in further view of Shyr.

Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hatular in view of Sainsbury in further view of Wilcox and in further view of Shyr.

These rejections are not applicable to the amended claims and their dependent claims. Applicants traverse these rejections on the grounds that these references are defective in establishing a *prima facie* case of obviousness over the amended independent claims, as is required by 35 U.S.C. §103(a).

Amended independent claim 1 recites, among other things, ". . . receiving a first feedback signal indicative of a target voltage required by the load, wherein the first feedback signal is an external feedback; receiving a second feedback signal indicative of the DC output, wherein the second feedback signal is an internal feedback; providing a controller module included in an AC-DC adapter and operable to receive the first feedback signal and the second feedback signal. . . ." Similarly, amended independent claims 12 and 22 recite, among other things, ". . . a controller module included in the AC-DC adapter and operable to receive a first feedback signal input indicative of a target voltage required by a load, wherein the first feedback signal is an external feedback, and a second feedback signal input indicative of the second DC output, wherein the second feedback signal is an internal feedback, the controller module adjusting the control signal, responsive to the first and second feedback signal inputs, to the

buck converter module to maintain the second DC output to be within a predefined range of the target voltage. . ." It is submitted that the references alone, or in any combination, fail to teach or suggest at least these elements.

As the PTO recognizes in MPEP §2142:

The Examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. If the Examiner does not produce a *prima facie* case, the applicant is under no obligation to submit evidence of nonobviousness.

The USPTO clearly cannot establish a *prima facie* case of obviousness in connection with the amended claims for the following reasons:

35 U.S.C. §103(a) provides that:

[a] patent may not be obtained...if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.... (emphasis added)

Thus, when evaluating a claim for determining obviousness, all limitations of the claim must be evaluated. However, it is submitted that the references, alone, or in any combination, at least, do not teach or suggest "receiving a first feedback signal indicative of a target voltage required by the load, wherein the first feedback signal is an external feedback; receiving a second feedback signal indicative of the DC output, wherein the second feedback signal is an internal feedback; providing a controller module included in an AC-DC adapter and operable to receive the first feedback signal and the second feedback signal" and it is also submitted that the references do not teach or suggest "a controller module included in the AC-DC adapter and operable to receive a first feedback signal input indicative of a target voltage required by a load, wherein the first feedback signal is an external feedback, and a second feedback signal input indicative of the second DC output, wherein the second feedback signal is an internal feedback, the controller module adjusting the control signal, responsive to the first and second feedback signal inputs, to the buck converter module to maintain the second DC output to be within a predefined range of the target voltage."

The Office Action mailed June 29, 2007 states on page 12 that "[a]s shown in figure 5 [of Sainsbury], the control module encompasses **both** the auto-voltage selector and the power monitor as they both **control** the voltage within the system to produce a certain output voltage. This control module is also housed within the AC-DC adapter module as disclosed in figure 3,

item 22." Emphasis original. Thus, according to the Office Action, the "control module" of Sainsbury comprises both the auto voltage selector 26 and the solid state power monitor 27 housed within the housing 22 and the "AC-DC adapter" of Sainsbury comprises the power block 15 contained within the housing 22.

However, it is submitted that neither Vsel nor Vsense is an external feedback, as is recited in the pending claims and described in the specification. Vsel is a reference voltage from the auto voltage selector 26 to the solid state power monitor 27. Because the Examiner is considering the combination of the auto voltage selector 26 and the solid state power monitor 27 as the "control module", any signal between them would be an internal signal to both the "control module" and the AC-DC adapter module". As described in the Office Action, shown in Figure 5, and described in column 4, line 52 through column 5, line 2, both are housed in the housing 22. As such, it is submitted that Vsel is internal to the "AC-DC adapter". Vsense is a feedback signal, shown in Figure 5, and described in column 5, lines 1-2, that measures the actual voltage delivered to the output connectors 37 and 38 [NOT the target voltage as recited in the claim]. Both of the output connectors 37 and 38 are housed in the housing 22 which, according to the Office Action, is part of the "AC-DC adapter module". Therefore, it is submitted that Vsense is internal to the "AC-DC adapter" and is not indicative of the target voltage required by the load.

To the contrary, as shown in Figures 2 and 3 and described on pages 10 and 11 of the pending application, the external feedback signal 215 is external to the AC-DC adapter 210 (e.g., comes from the device 101 and/or the battery 160).

Therefore, it is submitted that neither Vsel nor Vsense of Sainsbury are external to the AC-DC adapter and indicative of the target voltage, as recited in the pending claims and described in the specification.

The deficiencies of Sainsbury cannot be remedied by Wilcox, which is cited to teach a positive voltage during charging. Additionally, the deficiencies of Sainsbury and Wilcox cannot be remedied by Shyr, which is cited to teach trickle charging. Furthermore, the deficiencies of Sainsbury, Wilcox, and Shyr cannot be remedied by Hatular, which is cited to teach a buck converter.

Therefore, it is impossible to render the subject matter of the claims as a whole obvious based on a single reference or any combination of the references, and the above explicit terms of the statute cannot be met. As a result, the USPTO's burden of factually supporting a *prima*

*facie* case of obviousness clearly cannot be met with respect to the claims, and a rejection under 35 U.S.C. §103(a) is not applicable.

Therefore, because all the limitations of the amended claims at issue are NOT found in the cited references, as described above, independent claims 1, 12 and 22 are submitted to be allowable and Applicants respectfully request that the rejection of these claims be withdrawn.

Dependent claims 3-6 and 8-10 depend from and further limit independent claim 1, and dependent claims 12, 14, 15, 19 -21 depend from and further limit independent claim 12, and are submitted to be allowable for at least the reasons stated above. Therefore, Applicants respectfully request that these rejections be withdrawn.

In view of the above, it is respectfully submitted that all pending claims are in condition for allowance. Accordingly, an Notice of Allowance for all pending claims is respectfully requested.

The amended claims are supported by the original application at least in Figures 2 and 3 and pages 10 and 11. Thus, no new matter has been added.

The Examiner is invited to call the undersigned at the below-listed telephone number if a telephone conference would expedite or aid the prosecution and examination of this application.

Respectfully submitted,



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